## SECTION 6 - SUMMARY OF SAFETY AND EFFECTIVENESS

(03035)

(Premarket Notification [510(k)] Number)

### 1. Applicant

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### Corresponding Official:

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#### 2. Device Name

Device trade or proprietary name: Quantix/OR device

Common Name: Blood Flowmeter

Classification Name: Cardiovascular Blood Flowmeter, Class II, 870.2100

#### 3. Predicate Devices

The Quantix/OR device is substantially equivalent to the following device:

Device	Manufacturer	510(k) No.
FlowGuard	Biosonix Ltd./Cardiosonix Ltd.	K013803

4. Intended Use

The Quantix/OR device is intended for intra-operative examinations of blood flow

measurements.

5. Description of the Device

The Quantix/OR is a dual-beam, angle-independent, pulse-wave Doppler ultrasound

system used for intra-operative volume blood flow measurements, including blood flow

velocity and volume blood flow. In addition to the conventional Doppler (blood flow

velocity) measurements, the Quantix/OR technology utilizes special applications of

ultrasound Doppler methods to obtain real-time measurements according to the definition

of volume blood flow in target blood vessels. By definition, blood flow is the product of

velocity and cross-sectional area. In other words, the volume blood flow is calculated by

deriving flow velocity from the Doppler shift frequency using the basic standard formula

and then multiplying the velocity by the cross-section area of the blood vessel...

6. Technological Characteristics Compared to Predicate Device

The technological characteristics, e.g., overall design, materials, mechanism of action,

mode of operation, performance characteristics, etc., and the intended use of the

Quantix/OR device are substantially equivalent to the predicate devices cited above.

General Manager, Dr. Danny Manor

Jan. 27, 2003

Date



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

AUG 2 0 2003

Cardiosonix Ltd. c/o Ms. Ahava Stein Regulatory Affairs Consultant Beit Hapa'amon (Box 124) 20 Hata'as Street, 44425 Kfar Saba ISRAEL

Re: K030357

Quantix/OR

Regulation Number: 21 CFR 870.2100

Regulation Name: Cardiovascular Blood Flowmeter

Regulatory Class: Class II (two)

Product Code: 74 DPW Dated: June 22, 2003 Received: June 26, 2003

Dear Ms. Stein:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the Bi-Directional Doppler Volume Flowmeter, as described in your premarket notification:

Model CSN 01095 Model CSN 01094

#### Page 2 - Ms. Ahava Stein

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801, please contact the Office of Compliance at (301) 594-4591. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597 or at its Internet address "http://www.fda.gov/cdrh/dsmamain.html". If you have any questions regarding the content of this letter, please contact Kachi Enyinna at (301) 443-8262.

Sincerely yours,

Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosures

# Indications for Use Form Fill out one form for each ultrasound system and each transducer.

Mode of Operation

Intended Use: Diagnostic blood flow measurements

Fetal

Other (Specify)

Color Power Color Combined Other Clinical B C PWD **CWD** Doppler (Amplitude) Velocity (Specify) (Specify) Doppler Application **Imaging** Ophthalmic Abdominal X

Intra-operative (Specify) Pediatric Small Organ (Specify) Neonatal Cephalic Adult Cephalic Cardiac Trans-esophageal Trans-Rectal Trans-Vaginal Trans-Urethral Intra-Luminal Peripheral Vascular Laparoscopic Musculo-Skeletal Conventional Muscolo-Skeletal Superficial

Additional Comments: Intra-operative (Specify): For direct application to exposed blood vessel (miniature, sterilizable transducer)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use (Per 21 CFR 801.109) Indications for Use Form

Fill out one form for each ultrasound system and each transducer.

(Division Sign-Off)

Division of Cardiovascular Devices

510(k) Number\_\_